

Claims—Clean Version

59. (Amended) A process for forming granules of N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester having a particle size from about 20 mesh to about 200 mesh, said process comprising the steps of:

- (a) compacting N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester powder by roller compaction using a roller compactor, said compaction step producing compacts in the form of flakes or chips; and
- (b) breaking up said compacts to form granules using a mill.

60. The process of claim 59, further comprising the step of screening said granules.

61. The process of claim 59, further comprising the step of sifting said granules to obtain granules having a plurality of particle size ranges, said ranges including one or more ranges between 20-60 mesh, 60-100 mesh, and 100-200 mesh.

62. The process according to claim 59, wherein a dry binder is mixed with the N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester before the compacting step.

63. The process according to claim 62, wherein said dry binder is selected from the group consisting of pregelatinized corn starch, microcrystalline cellulose, hydrophilic polymers and mixtures thereof.

64. The process according to claim 63, wherein said dry binder is used in an amount from about 0.1% to about 40% by weight of the neotame powder.

65. The process according to claim 64, wherein said dry binder is used in an amount from about 1% to about 20% by weight of the neotame powder.

66. The process according to claim 59 wherein at least one sweetener selected from the group consisting of natural sweeteners and high intensity sweeteners is mixed with the N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester before the compacting step.
67. The process according to claim 66, wherein said sweetener is selected from the group consisting of aspartame, acesulfame salts, sucralose, saccharin, alitame, cyclamates, stevia derivatives, thaumatin, sucrose, high fructose corn syrup, high conversion corn syrup, crystalline fructose, glucose, dextrose, polyol sugar alcohols, invert sugar, and mixtures thereof.
68. The process according to claim 59, wherein a bulking agent is mixed with the N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester before the compacting step.
69. The process according to claim 68, wherein said bulking agent is selected from the group consisting of dextrose, maltodextrin, lactose, inulin, polyols, polydextrose, cellulose, cellulose derivatives, organic acids, and mixtures thereof.
70. A N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester composition having consisting essentially of granules having particle sizes in the range of 20-200 mesh, made according to the process comprising the steps of:
- (a) compacting N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester powder by roller compaction using a roller compactor, said compaction step producing compacts in the form of flakes or chips; and
 - (b) breaking up said compacts to form granules using a mill.
71. The composition of claim 70 wherein said granules have a particle size of from about 20 mesh to about 60 mesh.

72. The composition of claim 70 wherein said granules have a particle size of from about 60 mesh to about 100 mesh.

73. The composition of claim 70, wherein said granules have a particle size of from about 100 mesh to about 200 mesh.

74. The composition of claim 70 further comprising a dry binder, said dry binder mixed with the N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester before the compacting step.

75. The composition of claim 74, wherein said dry binder is selected from the group consisting of pregelatinized corn starch, microcrystalline cellulose, hydrophilic polymers and mixtures thereof.

76. The composition of claim 70, further comprising at least one additional sweetener, wherein said sweetener is selected from the group consisting of natural sweeteners and high intensity sweeteners is mixed with the N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester before the compacting step.

77. The composition of claim 76, wherein said sweetener is selected from the group consisting of aspartame, acesulfame salts, sucralose, saccharin, alitame, cyclamates, stevia derivatives, thaumatin, sucrose, high fructose corn syrup, high conversion corn syrup, crystalline fructose, glucose, dextrose, polyol sugar alcohols, invert sugar, and mixtures thereof.

78. The composition of claim 70, further comprising a bulking agent, wherein said bulking agent is mixed with the N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester before the compacting step.

79. The composition of claim 78, wherein said bulking agent is selected from the group consisting of dextrose, maltodextrin, lactose, inulin, polyols, polydextrose, cellulose, cellulose derivatives, organic acids, and mixtures thereof.

80. A method of sweetening a food by including in said food a N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester composition according to claim 70 in an amount effective to sweeten said food.

81. The method of claim 80, wherein said food is selected from the group consisting of beverages, fluid dairy products, condiments, baked goods, frostings, bakery fillings, candy and chewing gum.

82. A sweetened food comprising a N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester composition according to claim 70 in an amount effective to sweeten the food.

83. The sweetened food of claim 82, wherein said food is selected from the group consisting of beverages, fluid dairy products, condiments, baked goods, frostings, bakery fillings, candy and chewing gum.

84. (Amended) A method of preparing a tabletop sweetener comprising the steps of:

- (a) forming a premix of a sweetening effective amount of N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester powder, a binding agent and a carrier;
- (b) compacting said premix by roller compaction using a roller compactor, said compaction step producing compacts in the form of flakes or chips; and
- (c) breaking up said compacts using a mill to form granules having a particle size from about 20 mesh to about 200 mesh.

85. The method of preparing a tabletop sweetener according to claim 84, wherein said carrier is selected from the group consisting of dextrose, citric acid, maltodextrin,

dextrose-maltodextrin blends, lactose, inulin, erythritol, sorbitol, sucrose, aspartame, acesulfame salts, sucralose, cyclamate, saccharin, stevioside, alitame and mixtures thereof.

86. The method of preparing a tabletop sweetener according to claim 84, wherein said binding agent is selected from the group consisting of maltodextrin, dextrose-maltodextrin blends, hydroxypropylmethyl cellulose, carboxymethyl cellulose, polyvinylpyrrolidone, sucrose and mixtures thereof.

87. A method of preparing a powdered soft drink mix comprising the steps of:

- (a) forming a premix of a sweetening effective amount of N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester powder, a binding agent and a carrier;
- (b) compacting said premix by roller compaction using a roller compactor, said compaction step producing compacts in the form of flakes or chips; and
- (c) breaking up said compacts using a mill to form granules, substantially all of said granules having a particle size from about 20 mesh to about 200 mesh.

88. The method of preparing a powdered soft drink mix of claim 87, wherein said carrier is selected from the group consisting of dextrose, citric acid, maltodextrin, dextrose-maltodextrin blends, lactose, inulin, erythritol, sorbitol, sucrose, aspartame, acesulfame salts, sucralose, cyclamate, saccharin, stevioside, alitame and mixtures thereof.

89. The method of preparing a powdered soft drink mix of claim 87, wherein said binding agent is selected from the group consisting of maltodextrin, dextrose-maltodextrin blends, hydroxypropylmethyl cellulose, carboxymethyl cellulose, polyvinylpyrrolidone, sucrose and mixtures thereof.

90. A process for preparing a blend of granules of N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester and a blending agent comprising the steps of:

- (a) compacting N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester powder by roller compaction using a roller compactor, said compaction step producing compacts in the form of flakes or chips;
- (b) breaking up said compacts using a mill to form granules of N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester, substantially all of said granules having a particle size from about 20 mesh to about 200 mesh; and
- (c) dry blending said granules of N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester with said blending agent.

91. The process of claim 90 wherein said blending agent is selected from the group consisting of aspartame, acesulfame salts, sucralose, saccharin, alitame, cyclamates, stevia derivatives, thaumatin, sucrose, fructose, dextrose, polyol sugar alcohols, dextrose, citric acid, dextrin, maltodextrin, dextrose-maltodextrin blends, lactose, inulin, erythritol, sorbitol, stevioside, hydroxypropylmethyl cellulose, carboxymethyl cellulose, polyvinylpyrrolidone, N-[N-(3,3-dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-methyl ester and mixtures thereof.

REMARKS

Applicant respectfully requests reconsideration of the claims as presently amended. Claims 59-69 and 84-91 stand rejected under 35 USC 112, first paragraph. Claims 59-91 stand rejected under 35 USC 103(a) as allegedly unpatentable over U.S. Patent No. 5,480,668 to Nofre et al ("Nofre") in light of U.S. Patent No. 5,358,186 to Kataoka et al ("Kataoka").

Applicant has amended claims 59 and 84 to eliminate the portion of each claim asserted by the Examiner to be lacking support in the specification.